



Science at the heart of medicine

## NEW STUDY CASTS FURTHER DOUBT ON RISK OF DEATH FROM HIGHER SALT INTAKE

**May 15, 2008** — (BRONX, NY) — Contrary to long-held assumptions, high-salt diets may not increase the risk of death, according to investigators from the Albert Einstein College of Medicine of Yeshiva University. They reached their conclusion after examining dietary intake among a nationally representative sample of adults in the U.S. The Einstein researchers actually observed a significantly increased risk of death from cardiovascular disease (CVD) associated with lower sodium diets. They report their findings in the advance online edition of the *Journal of General Internal Medicine*.

The researchers analyzed data from the Third National Health and Nutrition Examination Survey (NHANES III), which was conducted by the federal government among a nationally representative sample of U.S. adults. These data were then compared against death records that had been collected by the government through the year 2000. The sample of approximately 8,700 represented American adults who were over 30 years of age at the time of the baseline survey (1988-1994) and were not on a special low-salt diet.



After adjusting for known CVD risk factors, such as smoking, diabetes and blood pressure, the one-fourth of the sample who reported consuming the lowest amount of sodium were found to be 80% more likely to die from CVD compared to the one-fourth of the sample consuming the highest level of sodium. The risk for death from any cause appeared 24% greater for those consuming lower salt, but this latter difference was not quite large enough to dismiss the role of chance.

"Our findings suggest that for the general adult population, higher sodium is very unlikely to be independently associated with higher risk of death from CVD or all other causes of death," says Dr. Hillel W. Cohen, lead author of the study and associate professor of epidemiology and population health at Einstein.

Since the first NHANES survey in the early 1970s, data from NHANES have been used extensively to describe patterns of nutrition and health in the U.S. The results from this current study are consistent with findings reported previously from two earlier NHANES surveys. While the federal government currently repeats NHANES surveys every two years, NHANES III is the latest available survey that can be compared with later death records.

Since NHANES III was an observational study and not a clinical trial, no definite conclusions about cause and effect were possible, says Dr. Cohen. "However, our findings do again raise questions about the usefulness or even safety of universal recommendations for lower salt diets for all individuals, regardless of their blood pressure status or other health characteristics," he cautions.

Other Einstein researchers on the study were Dr. Susan M. Hailpern and Dr. Michael H. Alderman.

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